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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,160	08/27/2003	Douglas Gene Keithley	MP0976(13036/17	7056
60537 7590 07/06/2007 BRINKS HOFER GILSON & LIONE/MARVELL P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER PHAM, THIERRY L	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 07/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/650,160

Applicant(s)

KEITHLEY, DOUGLAS GENE

Examiner

Thierry L. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/27/03, 8/9/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

- This action is responsive to the following communication: Nonprovisional application filed on 8/27/03.
- Claims 1-37 are pending.
- IDS filed on 8/27/03 & 8/9/06 have been considered and herein attached (PTO 1449) with Office Action.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

The drawings are objected to because of typo-error. Fig. 5 (step 54), "formt" should read as "format". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Oikawa (JP 05167850A, translation herein attached).

Regarding claim 1, Oikawa discloses an apparatus (optical printer, abstract and par. 8-12) comprising: a first processor (pattern matching circuit 1, abstract and par. 2-5), the first processor adapted to: identify a grid of pixels having a predetermined pattern (pattern identification, par. 3-7) of pixel values, the pattern optimized to reduce undesirable toner placement (to form smooth lines, abstract and par. 28); obtain a predetermined pcode (pulse width modulating circuit 2, abstract and par. 2-5) grid from a memory for the identified grid of pixels; and send the predetermined pcode grid to controller circuit (par. 33) for printing.

Regarding claim 2, Oikawa further discloses the apparatus recited in claim 1 wherein said processor is a pcode processor (pulse width modulating circuit 2, abstract and par. 2-5).

Regarding claim 3, Oikawa further discloses the apparatus recited in claim 2 further comprising a second processor (pulse density modulation, par. 28) adapted to format print data to pixel data, the pixel data including pixel values.

Regarding claim 4, Oikawa further discloses the apparatus recited in claim 1 wherein the first processor is adapted to format (par. 28) print data to pixel data, the pixel data including pixel values.

Regarding claim 5, Oikawa further discloses the apparatus recited in claim 1 wherein the grid of pixels is a six-pixel by six-pixel grid (par. 8).

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Regarding claim 6, Oikawa further discloses the apparatus recited in claim 1 wherein the memory is a register internal (par. 10) to the first processor.

Regarding claim 7, Oikawa further discloses the apparatus recited in claim 1 wherein the memory is non-volatile but re-writable memory (storage memory device within optical printer including RAM, DRAM, EEPROM, hard drive, and etc).

Regarding claim 8, Oikawa further discloses the apparatus recited in claim 1 wherein the memory is external to the first processor (e.g. host computer, par. 15).

Regarding claim 9, Oikawa further discloses the apparatus recited in claim 1 wherein the predetermined pattern of pixel values and its corresponding pcode grid applies to a first color and a second predetermined pattern of pixel values and its corresponding pcode grid applies to a second color (par. 16-18).

Regarding claim 10, Oikawa further discloses the apparatus recited in claim 1 wherein the apparatus is selected from a group consisting of a printer (optical printer, par. 3-7), a copier, and a multifunction appliance.

Regarding claims 11-17: Claims 11-17 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 1, 3, 5-9 (respectively); therefore, claims 11-17 are rejected for the same rejection rationale/basis as described in claims 1, 3, 5-9 (respectively) above.

Regarding claims 18-37 recite limitations that are similar and in the same scope of invention as to those in claims 1-17 above; therefore, claims 18-37 are rejected for the same rejection rationale/basis as described in claims 1-17.

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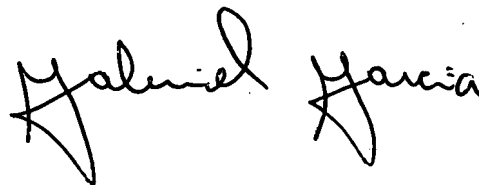
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham

A handwritten signature in black ink that reads "Gabriel Garcia". The signature is written in a cursive, flowing style with a large initial "G".

**GABRIEL GARCIA  
PRIMARY EXAMINER**